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REMARKS

Responsive to the Office action mailed January 20, 2006, applicant request consideration of the following remarks and reconsideration of the rejections set forth in said office action.

Claims 1-22 and 26-31 and 33 were rejected under 35 USC 103(a) as being unpatentable over Feasey et al '053. Applicant respectfully submits that Feasey et al '053 fails to render obvious the present invention.

The present invention is directed toward the discovery of a stabilized basic hydrogen peroxide composition. The use of alkaline hydrogen peroxide formulations for cleaning is known. However, the use of hydrogen peroxide in alkaline cleaning compositions has been hindered by the strong tendency of alkaline hydrogen peroxide compositions to decompose during storage. Under typical storage conditions, decomposition may produce hydroxide ions, which increases the pH and thus further increases the decomposition rate. The present invention is directed to hydrogen peroxide compositions that are stable at alkaline conditions. Exemplary compositions exhibited less than 10% hydrogen peroxide loss after storage for 24 hours at 85°C. The compositions comprise: a stabilizer system comprising: (a) about 10 ppm by weight to about 1 wt% of a stannate stabilizer; (b) about 10 ppm by weight to about 1 wt% of a phosphonic acid chelating agent or a mixture of phosphonic acid chelating agents; and (c) about 10 ppm by weight to about 1 wt% of an aromatic chelating agent or a mixture of aromatic chelating agents; wherein the composition comprises less than 1 ppm of pyrophosphate; and the composition has a pH greater than 7.0.

The data in the present application shows that hydrogen peroxide stability at alkaline pHs is only provided by the three component stabilizer system claimed in the present application. Two component combinations of the components of the present invention do not provide the stability of the claimed composition and would not be acceptable for commercial products because of the decomposition of the hydrogen peroxide.

The examiner has characterized Feasey et al '053 as disclosing hydrogen peroxide solutions which are stabilized with a phosphonic acid chelating agent and teaching in the Abstract and paragraph bridging columns 4 and 5 that the phosphonic acid stabilizer can be employed in combination with other stabilizers such as stannates and salicyclic acid. The examiner has also indicated that Feasey et al. '053 discloses at column 4, lines 13-23 that the solutions may be used in alkaline solutions for metal extraction.

Applicant submits that Feasey et al '053 fails to disclose an alkaline stabilized peroxide solution as claimed in the present application. At column 3, lines 57-66 Feasey et al '053 discloses that the solution is employed in acid or soluble salt form and that it is preferable to select stabilizers that have been acidified with no halide acids. At column 4 lines 10-12 the concentrated solution is described as having a pH of from 0 to 6. In the examples of Feasey et al '053 the solution is described as having an acidic pH. See example 6 at column 7, line 42 and example 13 at column 9, line 1. Neither the description nor examples of Feasey et al '053 disclose or render obvious a stabilized alkaline peroxide solution. It is submitted that the disclosure of Feasey et al. '053 at column 4, line 13-23 is that of adding an acidic stabilized hydrogen peroxide concentrate to an alkaline solution for metal extraction. There is no disclosure of a stabilized alkaline peroxide solution. This is further evidenced by claims of Feasey et al. '053 which are limited to "...a concentrated aqueous acidic hydrogen peroxide solution...". See independent claims 1 and 10.

The data in the present application shows that at alkaline pHs a single phosphonic acid does not provide stability, see Table 1. Further, the data shows that at alkaline pH's, pyrophosphate destabilizes hydrogen peroxide, see Table 4. Feasey et al '053, at column 4, lines 64-66 discloses that in that invention the stabilizer (phosphonic acid) can be the sole stabilizer. Clearly, Feasey et al '0539 is directed to and discloses only acidic stabilized hydrogen peroxide, not alkaline stabilized hydrogen peroxide.

The data in the present application shows that stability of hydrogen peroxide solutions at alkaline pHs is only provided by the three component stabilizer system claimed in the present application. Two component combinations of the components of the present invention do not provide the required

stability. See Tables 1, 2 and 3.

Applicant respectfully submits that Feasey et al. '053 discloses an acidic stabilized hydrogen peroxide solution and fails to render obvious the stable alkaline peroxide composition of the present invention.

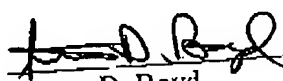
Claims 23 -25 and 32 were rejected under 35 USC 103(a) as being unpatentable over Feasey et al. '053 further in view of Sugihara et al. '311. Applicants submit that Sugihara et al. '311 fails to remedy the deficiencies noted above with respect to Feasey et al. '053.

Sugihara et al. '31 discloses a basic cleaning solution that comprises hydrogen peroxide, ammonia and a chelating agent having a least two phosphonic acid groups. There is no disclosure of the three component stabilizer system of the present invention. The data in the present application shows that a phosphonic acid chelating agent alone does not provide the stability of the alkaline hydrogen peroxide solutions that the present invention provides, see Table 1. Applicants submit that Sugihara et al. '311 neither alone nor in combination with Feasey et al. '053 renders obvious the present invention.

In view of the foregoing remarks, applicant respectfully submits that claims 1 - 31 of the present application are in condition for allowance and prompt favorable action is solicited.

Respectfully submitted,

Date: April 6, 2006


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